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## **Abstract Of The Disclosure**

A method for automatically reconstructing topographical information for a given mesh, altering the mesh by introducing, deleting, or splitting existing polygons when needed. An OctTree space decomposition is used to achieve a log2-complexity search method to find the closest vertex in the polygonal soup to a given point in space. Linear complexities are used to find triangles connected to a given vertex and all triangles connected to a given triangle. The triangles are split to enforce conductivity.